

Title (en)
MACHINE TOOL

Title (de)
WERKZEUGMASCHINE

Title (fr)
MACHINE-OUTIL

Publication
EP 3611585 B1 20231122 (EN)

Application
EP 19188793 A 20190729

Priority
JP 2018144887 A 20180801

Abstract (en)
[origin: EP3611585A1] A machine tool includes: a main spindle that holds a work piece; a tool holding unit that holds a tool for processing the work piece; a detection unit that detects vibration generated during processing of the work piece; and a processor that controls machining of the work piece performed by the tool, in which the processor compares a detected value detected by the detection unit with a predefined threshold value, interrupts the machining by releasing contact between the work piece and the tool at time of generation of chatter vibration or when there is a sign of the generation of the chatter vibration in which the detected value exceeds the threshold value, and analyzes the chatter vibration while the machining is being interrupted on basis of the detected value detected by the detection unit before the interruption.

IPC 8 full level
G05B 19/404 (2006.01); **B23Q 17/09** (2006.01); **G05B 19/4065** (2006.01)

CPC (source: CN EP US)
B23Q 15/00 (2013.01 - CN); **B23Q 17/00** (2013.01 - CN); **B23Q 17/09** (2013.01 - CN); **B23Q 17/0976** (2013.01 - EP); **B23Q 17/12** (2013.01 - US); **G05B 19/404** (2013.01 - EP); **G05B 19/4163** (2013.01 - US); **G05B 2219/37434** (2013.01 - EP US); **G05B 2219/37513** (2013.01 - EP); **G05B 2219/41256** (2013.01 - EP US)

Citation (examination)
US 5170358 A 19921208 - DELIO THOMAS S [US]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3611585 A1 20200219; **EP 3611585 B1 20231122**; CN 110788668 A 20200214; CN 110788668 B 20230224; JP 2020019097 A 20200206; JP 7194965 B2 20221223; US 11003172 B2 20210511; US 2020041983 A1 20200206

DOCDB simple family (application)
EP 19188793 A 20190729; CN 201910704336 A 20190731; JP 2018144887 A 20180801; US 201916523194 A 20190726